A Historical Perspective to Revenue Performance in Kenya
KENYA’S REVENUE ANALYSIS
2010 -2015
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The Institute of Certified Public Accountants of Kenya (ICPAK) is a statutory body of accountants with the mandate to develop and regulate the accountancy profession in Kenya. The Institute is further mandated under Sec 8 of the Accountants’ Act of 2008 to advise the Cabinet Secretary for Finance on matters relating to governance and accountability in all sectors of the economy.

As Kenya’s budget continues to grow in trillions of shillings, there is need to put up a healthy fiscal management system that ensures stable revenues over time, improves equity and efficiency of taxes and, promotes investment towards economic growth and increased national income.

This report provides a timely presentation of a trend analysis of revenue growth as well as tax revenue yield over the past five years in a bid to inform budget planning and monitoring processes in Kenya. It highlights the growing variance between revenue targets and actual exchequer collections which has been occasioned by among others, substantial increases in public expenditure which has led to exerting commensurate pressure on the revenue targets.

The report affords recommendations critical in informing policy makers on the appropriate revenue raising mechanisms to implement to ensure the country meets its revenue projections. It recommends the adoption of the following among other measures to boost the country’s revenue raising capability; reforming the regime on direct taxes through the implementation of means tested tax incentives and a review of the Income brackets, shifting revenue reliance away from direct taxes, addressing the progressivity of VAT through the application of a graduated approach to VAT and planning for public expenditure in light of revenue generation capabilities.

We further observe that tax payer compliance is critical to achieving and meeting the revenue targets. However, the same is strongly influenced by the perception of where the tax payer’s resources are being applied. We are of the opinion that proper utilization of revenue generated from the taxpayers will inevitably raise the tax compliance rate in the country. We trust that going forward, as a country, we shall cut our deficit financing and provide financial oversight to ensure that wastage and poor management of public resources is met with accountability for these actions.

FCPA Fernandes Barasa
Chairman- ICPAK
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CPA Dr. Patrick Ngumi, (PhD)
Chief Executive- ICPAK
## ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AIA</td>
<td>Appropriations in Aid</td>
</tr>
<tr>
<td>EACCMA</td>
<td>East Africa Community Customs Management Act</td>
</tr>
<tr>
<td>FY</td>
<td>Financial Year</td>
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<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>ICPAK</td>
<td>Institute of Certified Public Accountants of Kenya</td>
</tr>
<tr>
<td>KES</td>
<td>Kenya Shillings</td>
</tr>
<tr>
<td>KIPPRA</td>
<td>Kenya Institute of Public Policy Research and Analysis</td>
</tr>
<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
</tr>
<tr>
<td>KRA</td>
<td>Kenya Revenue Authority</td>
</tr>
<tr>
<td>MDA</td>
<td>Ministries, Departments and Agencies</td>
</tr>
<tr>
<td>RARMP</td>
<td>Revenue Administration and Modernazation Programme</td>
</tr>
<tr>
<td>PwC</td>
<td>PricewaterhouseCoopers</td>
</tr>
<tr>
<td>TMP</td>
<td>Tax Modernization Program</td>
</tr>
<tr>
<td>PAYE</td>
<td>Pay As You Earn</td>
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<tr>
<td>VAT</td>
<td>Value Added Tax</td>
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EXECUTIVE SUMMARY

This paper gives a five-year historical analysis of revenue performance in Kenya. It aims to inform budget planning and monitoring processes in Kenya by ensuring a balanced budget. It is premised on the fact that a good fiscal management system ensures stable revenues over time, improves equity and efficiency of taxes and, promotes investment towards economic growth and increased national income.

The study focused on Kenya’s annual revenue performance between the financial years 2010/11 to 2014/15. It considered in greater detail, the performance of tax revenues being the largest contributor to the revenue portfolio, in order to establish performance trends for the specific taxes, identify strengths and weaknesses in the country’s revenue generation, collection and administration capabilities. It describes the year on year behaviour of the main taxes with a view to analyse the performance of each category of tax for the FY 2010/11 through to 2015/16.

The report begins with a brief description of Kenya’s revenue portfolio and an assessment of how the total amount of revenue rose in Kenya, both tax and non-tax revenue. It then provides an overview of the contribution made by each tax to the total. In the subsequent sections, it analyses the behaviour of each of the main taxes, that is, Income Tax, Valued Added Tax, Excise Duty, Customs duty, between the years 2010-2015.

It also provides an analysis of the current system in the context of tax reforms and policy changes that have been implemented during the period of study in order to evaluate the impact of these policy initiatives on the overall revenue performance of the Country. Performance is said to be satisfactory if the given revenue sources provide increasing revenue year after year. It also depends on how best the potential revenue bases have been tapped through a country’s effort to raise revenue.

The study utilised three indicators in its analysis to evaluate the revenue performance between the fiscal years 2010/11-2014/15. From the analysis, it was observed that Kenya’s revenue portfolio is significantly driven by tax revenue and that the primary contributor to tax revenue is income tax. This indicated that direct taxes still drove the tax revenue structure of the country and hence efforts should be made to diversify the sources and increase the tax bases. The analysis of the performance of various taxes indicated that overly, there has been an increase in collection of taxes in the country. The analysis also observed that taxes from AIA have been on a downward trend, a finding that has been observed by the Controller of Budget in her reports, which identified poor reporting of revenues generated from AIA’s by Government MDAs.
BACKGROUND

Taxation is the largest source of government revenue in Kenya. Marina et al. (2002) contends that, taxation is the only known practical manner for collecting resources in order to finance public expenditure for goods and services consumed by the public. However, non-tax revenue, also plays a significant role in funding sustainable public budgets.

As the significant source of revenue, a sound tax system is one that exhibits the qualities to raise essential revenue to deter excessive government borrowing, and in a manner that does not introduce economic imbalances. A country’s revenue performance is considered satisfactory on a given measuring scale if the available revenue sources provide increasing revenue year after year. The sources should also be income elastic with reference to their base and should generate commensurate revenues to fund the government’s expenditure plans.

A good fiscal management system ensures that there are stable revenues over time. Tax analysis and revenue forecasting have therefore become increasingly important functions as governments undertake to reform their tax and budget systems in order to enhance tax revenue, improve equity and efficiency of taxes, and promote investment and consequently economic growth with a view to increasing the national income. It is widely recognised that fiscal policy stability is key in promoting both domestic and foreign private-sector investment.

Understanding revenue forecasting practices is essential to budget planning and monitoring processes. Revenue forecasts define the resource envelope and forms the basis for effective medium-term planning. They serve as the principal resource constraint and, if integrated in a top-down budget preparation process facilitate allocation of resources across different priority sectors.

To ensure a balanced budget and or to curtail deficit financing, it is important for the National Treasury to effectively monitor not only the expenditure side but also the collection of tax revenues on a regular basis. It has been observed that although Kenya’s GDP has been growing at almost the same rate over the years, there has been limited policy intervention to expand the tax base particularly, in formalising the incomes earned from the informal sector to facilitate the collection of taxes. Further, the growth of tax revenue however falls short of the ever ambitious growth in public expenditure. To strike a balance, the National Treasury has resorted to debt financing leading to the accumulation of national debt, projected to rise to KES 2.9 trillion by end of 2015.
1.1 FISCAL POLICY AND ECONOMIC GROWTH IN KENYA

Economic theory tells us that the nature of the tax regime can harm or foster growth. A regime that causes distortions to private agents’ investment incentives can retard investment and economic growth. Analogously, if a tax regime is such that it leads to internalization of externalities by private agents, it may induce efficiency in resource allocation and thus foster investment and growth of the economy. The same applies to the nature of government expenditure: excessive spending on consumption at the expense of investment is likely to deter growth and vice versa.

Kenya has had mixed economic performance since its independence in 1963. During the first decade of independence, the performance of the Kenyan economy was impressive. The growth of real GDP averaged 6.6% per year over the period 1964 –1973, and compared favourably with some of the Newly Industrialized Countries (NICs) of East Asia. This remarkable performance was attributed to consistency of economic policy, promotion of smallholder agricultural farming, high domestic demand, and expansion of market for domestic output within the East African region. The second decade marked the end of easy growth options and the emergence of powerful external shocks which, together with imprudent fiscal and monetary management, ushered in an era of slow and persistent economic decline with average real GDP falling further to 5.2% over the period.

In the third decade, the effects of expansionary fiscal policy of the previous decade, which led to the establishment of highly protected but grossly inefficient private industries and state corporations began to cause serious strain on the economy’s scarce resources. Budget deficits increased rapidly, exports and imports fell, and the economy performed poorly with average real GDP falling further to 4.2% over the period. The downward spiral continued in the fourth decade of independence. A combination of poor fiscal and monetary policy regime, external and internal shocks as well as political events resulted in the worst economic performance in the short history of the country. The average real GDP fell to a low of 2.2% between 1990 and 2002, (M’Amanja & Morrissey, 2005).

The biggest effect of the variations, have been variations in the tax revenue. To address these variations, there have been initiatives to modernize the Kenyan tax system since 1986. One of the key objectives of the modernization programme was to ensure that the revenue structure was flexible enough to guarantee increased revenues during the growth process without the
necessity of resorting to discretionary policy or inflationary financing. For the tax policy to mitigate the dangers of perpetual fiscal imbalances, it is expected that tax revenue will grow faster than national income, (Muriithi & Moyi, 2003).

It is important to mention that in the fifth decade, specifically the year 2014, Kenya earned its place in the top 10 economies in Africa, however, a large percentage of the population are still living in extreme poverty. This may come as a surprise following the rebasing of the economy that saw a 25.3 % increase in the country’s economic size, reflected in the increase of estimated Gross Domestic Product (GDP) from US $ 44.1 billion to US $55.2 billion. GDP rebasing involves replacing old base year volume and price measures to more recent base year, in this case year 2001 to 2009, in order to reflect more accurate realities of an economy. This resulted in the elevation of Kenya’s World Bank economic status from a low income economy, to a middle income economy with a per capita GDP of US $1,246. The rebasing of the economy also saw Information and Communication Technology (ICT) sectors established as a standalone sector, informed by the highly productive telecoms industry that birthed mobile payments technology, placing Kenya at the frontier of innovation. This increase in the national income had an effect on the tax revenue to GDP ratio.

1.2 HISTORY OF TAX REFORMS IN KENYA

Revenue mobilization was not a challenge for the government in the first decade of independence until the energy crisis of 1970 which necessitated tax reforms to mobilize more revenue (KIPPPRA, 2006). One of the key reforms during this era was the adoption of the Income Tax Act, Cap 470 in 1973 (AFDB, 2010). Since then, there have been three distinct phases of tax reform measures. According to a study by African Development Bank Group (AFDB, 2010), the initial measures were aimed at widening the tax base by way of introducing the sales tax in 1973 and the capital gains tax in 1975. These were reactive strategies aimed at mitigating the decline in duty revenues brought about by the imports substitution and industrialization policies.

Subsequently in the third decade, additional tax reforms were instituted. The World Bank study of 1985 on Kenya’s economic policy led to drafting of Sessional Paper No. 1 of 1986. Under the theme – Economic Management for Renewed Growth – the Sessional Paper underscored the necessity to boost local revenue to fund economic development.
In the period 1986 and 2002, through policy framework on Tax Modernization Programme (TMP), there was an effort to entrench tax reforms by: improving revenue raising capacity from 22 to 28% of GDP, improving economic efficiency of the tax system through lowering and rationalization of tax rates, enhancing greater reliance on self-assessment system supported by selective tax audits, improving administrative efficiency through computerization, and lastly address constraints in existing tax structures as well as overreliance on direct taxes (KIPPRA, 2006).

The formation of Kenya Revenue Authority (KRA), initially articulated in the TMP, through the KRA Act (Chapter 469 of the Laws of Kenya) overhauled the legislative framework that existed since independence. The KRA was expected to improve tax administration and implement organisational reforms that would improve tax administration. The focus of KRA’s administrative reforms in the first 10 years of its existence centred on achieving rationalization and stabilization of its organisational structure and general administrative systems (Cheeseman & Griffiths, 2005).

Faced with the challenges posed by manual processes, KRA in its second corporate plan recommended a strategy to address the identified challenges due to manual system of operation through the Revenue Administration Reform and Modernization Programme (RARMP) which commenced in 2004/05. The goal was to transform KRA into a modern fully integrated and client focused tax administration unit. Key initiatives introduced with the RARMP were; the Integrated Tax Management Systems (ITMS) for domestic revenue that initiated the E registration, Electronic Tax Registers (ETR’s) to be used by VAT registered tax payers (introduced in January 2005) and the Simba 2005 System (S2005S) to automate over 90% of customs operations (Ochieng, Wawire, Manyasa, & Thuku, 2014).

According to Muriithi & Moyi, (2003), tax reforms indeed had a positive impact on overall tax yield, even though the impact of the reforms was not always uniform. The reforms had a bigger impact on direct taxes than on indirect taxes, suggesting that revenue leakage was still a major problem for indirect taxes. The better responsiveness of direct taxes could then be attributed to the relative effectiveness of the reforms in direct taxes, which not only made the tax system simpler but also reduced avenues for evasion and corruption.
The analysis of revenue performance in Kenya needs to be evaluated alongside a clear understanding of the reform path. The historical successes and failures are sources of valuable lessons to inform the policy initiatives applied to strengthen the fiscal capability in the country.

1.3 TAX EFFICIENCY IN KENYA

Tax efficiency in Kenya, has been a subject that has attracted significant discussion among policy makers. According to Okech & Mburu (2011), the efficiency of a tax system was determined by applying the concepts of tax buoyancy and elasticity. The differences between tax elasticity and buoyancy is that tax elasticity measures the built-in response of revenues to changes in income, while tax buoyancy quantifies the total change in revenue accompanying changes in income. This implies that tax elasticity corrects revenue data for changes in tax policy parameters. The study carried out by Okech & Mburu (2011) noted that the Kenya tax system is neither income elastic nor buoyant supporting earlier findings by Moyi and Ronge (2006) and Muriithi and Moyi (2003). Whereas Moyi and Muriithi (2006) found buoyancy as being 0.662, Muriithi and Moyi (2003) found elasticity of tax system to be 0.645.

Additionally, the study affirmed that all major tax components in the country are inelastic. Income tax and excise tax had unit buoyancies below 1, over the study period contradicting Muriithi and Moyi (2003) who found the two taxes to have had buoyancies of above 1. The analysis proposed that the variance in buoyancies could be explained by the various tax reforms that were introduced after the study by Murrithi and Moyi (2003) including the introduction of ETR facility, Simba system among others. Further, from the study, import duty was the most buoyant tax component while the VAT was the least buoyant.

Major tax components were found to be inelastic based on tax-to-base inelastic however, import duty, excise duty and VAT had base-to-income elasticity of above 1, while income tax had approximately unity base-to-income elasticity. The study therefore concluded that a large percentage of tax revenue comes from discretionary tax policy and not from pure responsiveness of tax revenue to changes in national income. The study empirically affirms Kenya is yet to achieve this characteristic of a good tax system.
1.4 GLOBAL DEVELOPMENTS IN DESIGNING A TAXATION REGIME

In recent years, discussions on the ideal structure for a tax system, has been the subject of debate among fiscal policy professionals. The key question among government policy makers has been, ‘should rates of taxes tied to consumption be reduced to help taxpayers by increasing disposable income or increased to generate the much-needed tax revenues?’ (PwC, 2013). In the European Union (EU), most of the ten states that became EU members in May 2004 rely more on a value-added tax than on a corporate income tax. In Germany, the Tax Reform Act 2008 reduced the overall corporate tax rate from about 40 to about 30 percent, while simultaneously raising the value-added tax rate from 16 to 19 percent, thereby increasing the importance of indirect taxes in the overall tax system. The United States Congress also debated the Fair Tax Act of 2007, which proposed to repeal the income tax and other current federal taxes, such as the estate and gift tax, and implement a national sales tax instead.

The push to generate tax revenues is driven by growing pressure on public budgets in a tough economic climate, and the need to reduce government deficits. Electronic tax filing and payments were the most common tax reforms undertaken by countries worldwide during the past year, according to the latest edition of the Paying Taxes Report from the World Bank Group and PwC (PwC, 2015). Economies which have invested in online filing and payment infrastructure are reaping a digital dividend from these systems.

The growth of globalization has also had strong implications on the taxation regime applied in various countries. This has been attributed to the operations of multinational corporations operating in those countries. A large source of missed revenue is related to the mis-pricing of goods and services that are transferred within the multinational corporation, among the subsidiaries primarily with the aim of transferring out profits to low tax jurisdictions. Several economies are therefore adopting rules of transfer pricing in order to safeguard from income shifting that would affect the overall revenue performance of the country (Godin & Hindriks, 2015).
OBJECTIVES OF THE STUDY

In line with its mandate to advise of matters related to accountability, the Institute undertook this analysis with the primary objective of using evidence to evaluate government’s fiscal position in order to inform overall fiscal sustainability of the Country.

The specific objectives of the study were as follows;


b) To examine the strengths and weaknesses facing revenue raising capabilities in Kenya.

c) To provide information and recommendations to aid revenue forecasting.

SCOPE OF STUDY

This revenue analysis took a historical approach to analyse the revenue performance of the country and will focus on revenue data between the FY 2010/2011 until FY 2014/2015 in order to assess the trends as well as tax revenue yield. It also focused on revenue collected by the National government. It utilized performance indicators to assess tax and non-tax revenue performance, with a view to providing valuable recommendations for revenue generation.

According to the Budget Policy Statement (BPS) 2016, the National Treasury reported the total cumulative revenue, including Appropriations in Aid, amounting to KES 568.8 billion against a target of 642.9 billion, implying a shortfall of 74.7 billion. The shortfall has lead policy makers to question the approach used in forecasting national revenue to finance the annual budget. The study will therefore assess the revenue targets against the actual revenue collected in order to establish the trend and propose recommendations.

Due to the asymmetry in fiscal information, the analysis relied on revenue data provided by the Kenya National Bureau of Statistics 2015 Statistical Abstract for the overall analysis of revenue performance. The data provided in the statistical abstract further informed the choice of a 5-year study period.

In analysing tax efficiency, the study also utilized quarterly revenue data provided by the KRA for the FY 2005/2006 to FY 2014/2015.
JUSTIFICATION FOR THE STUDY

The budget for the FY 2015/2016, the fifth (5th) annual budget under the Constitution of Kenya 2010, saw the release of a KES 2.2 Trillion budget figures. The sheer size of that budget has occasioned discussions regarding the country’s capability to raise the revenue to fund the expenditure plans given the level of the national debt book and; previous performances and overall budget absorption capacity at both levels of government.

The debate on how realistic Kenya’s budgeting framework is has also ensued with the recorded failure by the revenue collector, the Kenya Revenue Authority, to meet the revenue targets for the FY 2014/15 and the first quarter of FY 2015/16. This notwithstanding, Government’s ambition to roll out a significant number of infrastructural development has been poised to compound the budget financing challenges.

These concerns, coupled with the revision of the World Banks growth forecasts in September 2015, should lead our policy makers to ponder on whether our economic statistical forecasts are right. Given that Kenya’s revenue portfolio is highly driven by tax revenues, we pose to ask in this study whether we have established an optimal revenue structure for maximum yield.

Through this analysis, we provide objective assessment of Kenya’s past revenue performance. We anticipate that the outcomes of the analysis and the resulting information will be valuable in the design, formulation and execution of sound fiscal and macroeconomic policies, as well as budget planning for subsequent financial years.
METHODOLOGY

The study conducted an extensive desk review to ascertain the gaps and inform the objects of the study. The desk review analysed reports from various government departments and entities, independent commissions, scholars and organisations on the respective subject matter.

The study employed a multiplicative model to historical time series data, collected from the KNBS statistical abstract 2015 and data provided by the KRA, in order to adjust for seasonality and irregularity in the revenue data. The multiplicative model is used where seasonal variation in the data increases over time. According to the quarterly data provided, this phenomenon is witnessed in the revenue data, thus informing the selection of this model. While we recognize that there are advanced techniques to deal with data irregularity lagged effects, the study chose to apply the approach above in order to address the seasonal variation in the data.

The analysis also applied a Tax Buoyancy Model to evaluate the response of the individual taxes to changes in National Income levels, in order to establish the productivity of the tax system. Although the use of Tax Elasticity would have yielded more reliable results, this approach is very demanding in terms of data requirements. Due to the limitation of information specific to discretionary measures applied during the study period, the Institute chose to utilize the Buoyancy indicator to measure responsiveness of tax.

In identifying the appropriate tax base for the buoyancy model, the study utilised GDP as the tax base to establish the buoyancy on all taxes. While we recognise that using various tax bases such as consumption, production and national income would have enhanced the reliability of the results, due to the unavailability of quarterly data for the period 2005/2006 to 2014/2015, the Institute chose to utilise quarterly GDP as the overall tax base.

In summary, the analysis utilises the tax revenue to GDP ratio, the revenue growth rate and the tax buoyancy rate to establish Kenya’s revenue performance and tax responsiveness over the study period.
2.1 TAX REVENUE TO GDP RATIO

This method attempts to ascertain whether the tax revenue of a government is increasing at a rate higher than the rate of increase of the national income or GDP. Tax to GDP ratio or tax revenue as a percentage of GDP is an indicator which provides some information necessary to understand the government’s fiscal deficit that is if government is spending more and receiving less than the overall deficit will rise on a year on year trajectory.

In developed economies, tax revenue increases significantly during an economic boom and substantially reduces during recessions. The relationship is typically reflected by the following response; when tax revenue increases and GDP does not, Tax-to-GDP ratio will increase, and when Tax revenue decreases and GDP increase, Tax-to-GDP ratio will decrease.

This study uses this indicator to evaluate Kenya’s revenue performance in comparison with other economies, namely; Nicaragua, Malaysia, South Africa, Sri Lanka, Sweden, Australia, Rwanda and Senegal using the following equation:

Equation 1: Tax-to-GDP ratio

\[
\text{Tax-to-GDP ratio} = \frac{\text{Tax revenue}}{\text{GDP of a country}}.
\]

2.2 GROWTH RATE

The analysis utilized this method to assess the change in revenue over the past year as a percentage relative to the base year. This method establishes the estimate of growth rate of revenue over a period of time.

This estimate may be made with reference to the preceding year or with reference to the preceding time period. When it is estimated with reference to the past year, it is calculated as the percentage change over the year as follows;

Equation 2: Growth Rate

\[
\Delta \frac{R}{R} \\
\text{Where;}
\]

\[
\Delta R - \text{Represents the change in revenue collections over the past year}
\]

\[R - \text{Represents revenue collections.}\]
This method uses a ratio of change in revenue in the current year over the total revenue of the past year and provides estimates for total revenue or for individual components of revenue. However, its significance is limited in analysing the causal relationship that suggests which variables have contributed to growth. This is especially true of variables such as price change, tax effort, or variation in GDP that affect the growth rate (Purohit, 2005).

### 2.3 TAX BUOYANCY

Tax buoyancy estimates the revenue response with endogenized tax policy. Tax buoyancy measures the total response of a tax to a change in income and shows the growth that result from the automatic growth of the base, occasioned by an increase in the National Income or GDP from discretionary tax changes. Unlike tax elasticity, the estimation of tax buoyancy does not require that discretionary changes in tax policy be controlled.

It must be noted however, that where tax policy instruments are subject to change from time to time, the elasticity of tax revenue may be difficult to estimate with considerable accuracy. Elasticity would provide information necessary to understand the level of responsiveness of tax revenue to discretionary measures; however, this approach relies on the completeness of information necessary to isolate discretionary measures applied in the tax system. As such, the estimation of tax elasticity requires an adjustment to the actual revenue series so as to separate the growth of revenue arising from discretionary changes from that due to automatic changes. (Belinga, et al., 2014)

The literature proposes four approaches namely; proportional adjustment, constant rate structure, divisia index and econometric methods, in the adjustment of time series tax data to eliminate the effects of discretionary tax measures. All the outlined approaches depend heavily on the availability, nature and reliability of information on tax revenues.

Tax buoyancy on the other hand, measures the responsiveness of revenues including changes in the tax system and its estimation does not require adjustments to the actual tax revenue. In a tax environment like Kenya, which has experienced many changes in tax policies, it may be difficult to identify and separate all discretionary tax policies that have been undertaken in the country. In this context, where tax policy parameters are in a state of constant fluctuation, the tax buoyancy provides an alternative approach to tax elasticity in evaluating tax revenue performance.
It is important to note that this indicator proves to be unreliable for forecasting or projections as it assumes that there is a well-defined trend in discretionary changes that have been made in the past and that the trend will continue in the future. However, the buoyancy indicator is a valuable measure to evaluate the past responsiveness of tax revenue to overall changes in national income. (Sen, 2006)

A tax is said to be buoyant if the tax revenues increase more than proportionately in response to a rise in national income, GDP or output.

This study applied a time series regression approach for the empirical measurement of buoyancy for the different types of taxes stated below. It therefore regresses the log of tax revenue on the log of the tax base, being GDP. The Coefficient on the log of the base is then interpreted to be a measure of the tax buoyancy.

**Equation 3: Tax Buoyancy**

\[
\ln(t_{rt}) = a + b \ln(g_{dpt})
\]

Where:

\(\ln\) = log

\(t_{rt}\) = Tax Revenue at time \(t\)

\(a\) = intercept

\(b\) = buoyancy of respective tax

\(g_{dpt}\) = GDP at time \(t\)
RESEARCH FINDINGS

This section provides an analysis of the various parameters under the study namely; the overall revenue performance of the FY 2010/11 to the FY 2014/15, the revenue growth in comparison with growth in GDP, the buoyancy of the various taxes and the various policy implications they pose.

3.1 OVERAL REVENUE PERFORMANCE 2010-2015

Table 1: Revenue Table

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>TAX REVENUES</td>
<td>272,263.87</td>
<td>328,908.78</td>
<td>373,086.04</td>
<td>449,590.07</td>
<td>542,245.18</td>
</tr>
<tr>
<td>Income Tax (PAYE)</td>
<td>144,267.92</td>
<td>174,774.70</td>
<td>199,847.16</td>
<td>249,872.80</td>
<td>299,768.07</td>
</tr>
<tr>
<td>Other Income Tax</td>
<td>127,995.95</td>
<td>154,134.08</td>
<td>173,238.88</td>
<td>199,717.27</td>
<td>242,477.11</td>
</tr>
<tr>
<td>(Corporation,Individual,</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advance &amp; Witholding)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAXES ON PROPERTY</td>
<td>352.10</td>
<td>490.30</td>
<td>653.73</td>
<td>-</td>
<td>1,360.51</td>
</tr>
<tr>
<td>Immovable Property</td>
<td>132.60</td>
<td>83.18</td>
<td>169.58</td>
<td>-</td>
<td>743.81</td>
</tr>
<tr>
<td>Financial and Capital</td>
<td>219.50</td>
<td>407.12</td>
<td>484.15</td>
<td>-</td>
<td>616.70</td>
</tr>
<tr>
<td>Transactions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TAXES FROM VAT</td>
<td>171,880.75</td>
<td>176,386.07</td>
<td>184,916.31</td>
<td>232,630.32</td>
<td>292,774.06</td>
</tr>
<tr>
<td>VAT Domestic</td>
<td>90,211.14</td>
<td>81,495.51</td>
<td>90,713.83</td>
<td>107,737.35</td>
<td>146,138.28</td>
</tr>
<tr>
<td>VAT on imports</td>
<td>81,669.61</td>
<td>94,890.56</td>
<td>94,202.48</td>
<td>124,892.97</td>
<td>146,635.78</td>
</tr>
<tr>
<td>TAXES ON OTHER GOODS</td>
<td>108,701.54</td>
<td>105,771.61</td>
<td>114,821.85</td>
<td>139,083.89</td>
<td>150,041.65</td>
</tr>
<tr>
<td>AND SERVICES</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Excise Taxes</td>
<td>80,566.54</td>
<td>78,884.26</td>
<td>85,660.29</td>
<td>102,029.10</td>
<td>122,170.42</td>
</tr>
<tr>
<td>Taxes on goods or</td>
<td>2,464.00</td>
<td>565.59</td>
<td>2,458.44</td>
<td>1,347.73</td>
<td>1,537.48</td>
</tr>
<tr>
<td>goods for services and</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>activities</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
<td>-----------</td>
</tr>
<tr>
<td>Taxes collected as AIA</td>
<td>25,671.00</td>
<td>26,321.76</td>
<td>26,703.12</td>
<td>35,707.06</td>
<td>26,333.75</td>
</tr>
<tr>
<td>Taxes on International Trade Transactions</td>
<td>66,670.45</td>
<td>76,473.85</td>
<td>81,812.59</td>
<td>113,953.59</td>
<td>131,916.17</td>
</tr>
<tr>
<td>Customs Duties</td>
<td>46,071.81</td>
<td>51,711.78</td>
<td>57,649.68</td>
<td>67,554.64</td>
<td>78,024.90</td>
</tr>
<tr>
<td>Other Taxes in International Trade</td>
<td>20,598.64</td>
<td>24,762.07</td>
<td>24,162.91</td>
<td>46,398.95</td>
<td>53,891.27</td>
</tr>
<tr>
<td>Other Taxes Not Elsewhere Classified</td>
<td>6,800.04</td>
<td>7,857.10</td>
<td>8,537.81</td>
<td>9,986.89</td>
<td>11,797.05</td>
</tr>
<tr>
<td><strong>TOTAL TAX REVENUE</strong></td>
<td><strong>626,668.75</strong></td>
<td><strong>695,887.71</strong></td>
<td><strong>763,828.33</strong></td>
<td><strong>945,244.76</strong></td>
<td><strong>1,130,134.62</strong></td>
</tr>
<tr>
<td>Social security contributions</td>
<td>659.58</td>
<td>110.87</td>
<td>584.48</td>
<td>580.79</td>
<td>660.81</td>
</tr>
<tr>
<td>Property Income</td>
<td>12,917.61</td>
<td>17,277.13</td>
<td>18,683.12</td>
<td>10,767.53</td>
<td>20,147.83</td>
</tr>
<tr>
<td>Sale of Goods and Services</td>
<td>1,891.37</td>
<td>7,366.72</td>
<td>11,735.49</td>
<td>13,400.05</td>
<td>8,622.99</td>
</tr>
<tr>
<td>Fines Penalties and Forfeiture</td>
<td>289.63</td>
<td>1,078.88</td>
<td>1,465.50</td>
<td>1,442.62</td>
<td>1,357.12</td>
</tr>
<tr>
<td>Repayments from domestic lending and on lending</td>
<td>1,159.75</td>
<td>1,611.56</td>
<td>2,183.55</td>
<td>6,353.11</td>
<td>2,034.24</td>
</tr>
<tr>
<td>Other receipts not elsewhere classified</td>
<td>7,823.31</td>
<td>2,188.91</td>
<td>9,245.38</td>
<td>3,204.29</td>
<td>3,445.20</td>
</tr>
<tr>
<td><strong>TOTAL NON TAX REVENUE</strong></td>
<td><strong>24,741.25</strong></td>
<td><strong>29,634.07</strong></td>
<td><strong>43,897.52</strong></td>
<td><strong>35,748.39</strong></td>
<td><strong>36,268.19</strong></td>
</tr>
<tr>
<td><strong>TOTAL REVENUE</strong></td>
<td><strong>651,410.00</strong></td>
<td><strong>725,521.78</strong></td>
<td><strong>807,725.85</strong></td>
<td><strong>980,993.15</strong></td>
<td><strong>1,166,402.81</strong></td>
</tr>
<tr>
<td>Nominal GDP</td>
<td>3,104,303.00</td>
<td>3,294,026.00</td>
<td>3,444,066.00</td>
<td>3,639,938.00</td>
<td>3,833,876.00</td>
</tr>
<tr>
<td>Tax Revenue as a % of GDP</td>
<td>20.19%</td>
<td>21.13%</td>
<td>22.18%</td>
<td>25.97%</td>
<td>29.48%</td>
</tr>
<tr>
<td>Total Revenue as a % of GDP</td>
<td>20.98%</td>
<td>22.03%</td>
<td>23.45%</td>
<td>26.95%</td>
<td>30.42%</td>
</tr>
<tr>
<td>Annual % Change in GDP</td>
<td>8.4%</td>
<td>6.1%</td>
<td>4.6%</td>
<td>5.7%</td>
<td>5.3%</td>
</tr>
</tbody>
</table>

Source: Figures from KNBS & ICPAK Computations
3.2 REVENUE GROWTH AND GDP

Macroeconomic forecasts play a strategic role in signalling the state of the economy, and may therefore reflect political as well as technical considerations. Prudent economic growth forecasts should be used to minimize the risk of fiscal slippages instead of applying an upward bias in economic growth.

Between the years 2010/11 to 2014/15, our analysis indicates a positive relationship between revenue growth and economic growth. This implies that economic growth directly affects the revenue forecasts of a given financial year. It is therefore imperative that the economic variables supporting growth forecasts are accurately identified, in order to insulate against fiscal slippages. Moreover, appropriate contingency appropriations for the variances to growth forecasts should be factored in revenue projections.
3.3 KENYA’S REVENUE PORTFOLIO

During the period 2010/11 to 2014/15, Kenya’s total revenue averaged 24% of GDP. Following the rebasing of the economy, the Kenyan revenue to GDP ratio reduced from 24% to 19% as a result of the increased national income. The Country’s self-reliance in revenue performance stems strongly from the challenges of low access to development partner financial support during the 1990s (World Bank, 2014). This combined with an income tax and value added tax regime that has been above 12% of GDP since 2000/01, and has sustained the Country’s positive revenue performance, providing an atmosphere conducive to use fiscal policy for both short and long-term growth objectives (Planning, 2013).

Kenya’s tax contribution to the revenue portfolio between the years 2010/11 – 2014/15 averaged 96% while non-tax revenue accounted for 4%. The data also indicates an upward trend in the growth of tax revenue and a declining proportion of contribution to non-tax revenue between the years 2010/11-2014/15.

Figure 2: Revenue Performance

![Revenue Performance Chart]

Source: Figures from KNBS
3.4 Revenue Growth

The years 2010/11-2014/15 also saw the country’s total revenue significantly increase from KES 651 billion in 2010/2011 to KES 1.1 trillion in 2014/2015 representing a 44% increase in revenue in 5 years. The growth is largely attributed to significant increases in income tax, which increased from KES 272 billion in 2010/2011 to KES 542 billion in 2015, equivalent to 50% increase in collection.

It is however important to observe that although absolute revenue collection increased year on year, there was a sharp increase in the percentage growth of revenue in FY 2013/2014 from an 11.33% increase in 2012/2013 to a 21.45% increase (see Figure 3 below). Thereafter there was a reduction of 3% in the growth levels to 18.9% in FY 2014/2015. It is also important to highlight that substantial increases in revenue collection have been observed during periods where tax reform has been effective in enhancing compliance. This effect was first witnessed in 2004 where sharp rises in revenue was recorded due to the tax amnesty offered by the Kenya Revenue Authority which waived interest on all tax arrears. This, in addition to the principle of self-assessment, led to significant increases in tax collections during that period (World Bank, 2014).

*Figure 3: Revenue Growth*

![Revenue Growth Chart](chart.png)
3.5 TAX REVENUE TO GDP RATIO

The growth of tax revenue as a percentage of GDP has also been impressive. (Figure 3 above) shows the tax revenue to GDP ratio trend over the 5-year period. As shown, tax revenue to GDP significantly increases over the period from 20% in 2010/2011 to 29% in 2014/2015.

When compared with other economies within the Low Middle Income (LMI) income category, Kenya performs impressively against its comparators, whose tax to GDP ratio stands between 11-15% (see Figure 4 below). However, as the country embarks on capital intensive development projects in a bid to achieve the middle income status; there is need to strengthen its capacity to raise revenue.

Figure 4: Tax Revenue to GDP Ratio

Source: World Bank Data Year 2013
POLICY IMPLICATIONS

A trend analysis of revenue growth is critical in informing revenue projections for the coming years. Kenya’s budget process has inadequately facilitated accurate forecasts for resource collection. The common tendency has therefore been to make overly optimistic revenue projections leading to an increased uncertainty of resource flows.

The role of Parliament is critical in providing oversight over the revenue projections. According to the Parliamentary report on the Budget Policy Statement, the Budget and Appropriations’ Committee expressed concerns over the revenue projections provided by the executive in the FY 2014/2015 which the Committee thought of as ambitious and not backed by economic fundamentals. However, during the evaluations of the budget estimates, the Committee did not vary the projections accordingly, leading to the adoption of the current revenue estimates guiding the country’s revenue collection.

Revenue projections are usually supported by various tax policy and administration initiatives. The budget FY 2014/2015 for instance, anticipated some reforms in the policy and legal framework on tax administration through implementation of the Excise Act 2015, comprehensive review of the Income Tax Act and the enactment of the Tax Procedures Law. The Excise Act 2015 and the Tax Procedures Act were only enacted into law in December 2015, while the process of reviewing the Income Tax Act is unlikely to be completed by the end of FY 2015/2016. These delays in effecting anticipated policy measures have an impact on the revenue productivity. The process to automate revenue administration through iTax has also been shrouded in a lot of implementation challenges with the knock on effect on overall revenue collection. The KRA automation committee has reported reductions in the revenue collection in Q1 & Q2 raising concerns regarding Kenya’s revenue performance in 2015/2016.
3.6 KENYA’S TAX REVENUE PERFORMANCE

The revenue portfolio in Kenya is composed overly of income tax, vat, excise taxes, custom duties and taxes collected as appropriations in aid. Figure 5 below indicates their performance over the last five years.

**Figure 5: Tax Revenue Trends (2010-2015)**

![Graph showing tax revenue trends from 2010 to 2015 with specific percentage changes for each fiscal year.]

**3.6.1 INCOME TAX**

The performance of Income tax between FY 2011/2012 to 2012/2013 illustrated in (Figure 6), reflected a decline in PAYE from a 21% growth to 14%, followed by a significant increase in 2013/2014 of 11% and thereafter declining by 5%. (Figure 8) illustrates the performance of PAYE as a proportion of tax revenue. The data indicates that PAYE registered a steady marginal increase between the years 2010-2015.

**Figure 6: Income Tax Trend**

![Graph showing percentage change in income tax from 2011/2012 to 2014/2015.]

Source: Figures KNBS
Other Income Tax similarly declined between the FY 2011/2012 to 2012/2013 from 21% to 12%, followed by a steady increase in 2013/2014 of 3% and 6% in 2014/2015. However, the proportion of corporation tax as a proportion of tax revenue grew marginally between the years 2010 to 2012 followed by a decline in 2012/2013 and a marginal increase in 2013/2014.

**POLICY IMPLICATIONS**

Over 40% of the tax collection in Kenya is generated from direct taxes. (Figure8) below provides a pictorial representation on the proportion of particular taxes in total tax revenue. The improved performance of income taxes can largely be attributed to higher tax compliance (World Bank, 2014).

This analysis corresponds with the KRA’s revenue performance report 2013/2014 that attributed the sharp increase in PAYE tax revenue to the implementation of devolution, which introduced the County payroll. The marginal increase in the proportion of Income tax as a percentage of tax revenue is reflective of the minimal policy initiatives implemented to reform the income tax regime in Kenya. As noted above, this tax contributes the largest proportion to the tax revenue portfolio. However, according the KRA Kenya has only registered 1.6 Million tax payers. This implies that out of a population of 43 million people, under 5% of the population contribute to income tax. This therefore raises fundamental questions regarding the harnessing of the tax base in Kenya. It is therefore critical that the Income Tax regime is reviewed to broaden the tax base in order to realize increased revenue collection.

**3.6.2 VAT**

Domestic VAT underperformed in the FY 2010/11 registering negative growth of -9.6%. This is attributed to the impact of VAT Withholding that was occasioned by a slow processing of payments on development projects. According to the KRA, in the same year, significant donor funding was directed to infrastructure development which was either tax exempt or the sector taxpayers recorded high input tax deductions. However, this trend reversed in FY 2012/2013 registering a positive growth of 11.3% and a further 18.7% in FY 2013/14.

VAT on Domestic goods increased significantly by 17% between the FY 2013/14 and FY 2014/15. This was attributed to the implementation of the VAT Act 2013 that applied the standard rate to more goods and services. The reintroduction of withholding VAT may also have had an impact on the increased collection of domestic VAT. Withholding VAT was reintroduced in the Finance Act of 2014, at the rate of 6%, with effect from 19th September 2014.
As illustrated in (Figure 5), the share of VAT on the other hand has progressively declined from 27% of tax revenue in 2010/2011 to 25% in 2014/2015. The passing of the VAT Act 2013 marked a significant step in the process of tax reforms in the country. The past 2 decades have hardly seen substantial changes in tax policy apart from the piecemeal amendments to the tax statutes, motivated by the need to ensure tax collection increases. (Figure 7) displays a convergence in the proportion of VAT from imports and VAT from domestic, with a year on year reduction in the import VAT and a progressive increase in the domestic VAT. This may be due to the harmonization of the EACMA in line with the regional integration efforts aimed at reducing tax rates on imports.

Figure 7: VAT Trend

![VAT Trend (2011-2015)](image)

Source: Figures from KNBS

Figure 8: Proportion of Tax Revenue Trend

![Proportion of Tax Revenue Trend](image)

Source: Figures from KNBS
3.6.3 CUSTOMS & EXCISE DUTY

Customs and Excise duties account for and an average of 7.2% and 11.4% respectively, of the total tax revenue collected over the 5-year period. These taxes constitute the indirect tax portfolio which applies to a broad base of the society. Excise duty has traditionally been used as a revenue raising mechanism on high volume and price inelastic goods. In modern taxation regimes, excise tax is used to address negative externalities associated with consumption of commodities. It is therefore primarily applied to tobacco, alcohol, motor vehicles and fuels.

The function of a customs tax is primarily to facilitate trade and protect the society. The administration of Customs duty in Kenya is underpinned by the East Africa Community Customs Management Act (EACCMA) of 2004. As such, any customs policy interventions are based on consultations with member states, as provided by the protocol on the establishment of the East African Customs Union.

Figure 9: Excise & Customs Trend (2011 – 2015)

Source: Figures from KNBS
**EXCISE DUTY**

(Figure 9 above) illustrates that excise taxes underperformed in the FY 2011/12 growing at a rate of -2.09% followed by a significant increase of 8.5% and 19.1% in FY 2012/13 and 2013/14 respectively. The analysis corresponds to the KRA report 2013/2014 that cited the decline in Excise taxes in 2011/12. This was attributed to the mobile telecoms price wars as well as the removal of Excise duty on kerosene and diesel in FY 2011/12.

It is imperative to note that in the Finance Act 2013, the government introduced Excise duty on financial services which impacted the Excise Duty collected in Quarter 3 and 4 of the FY 2012/13. This explains the significant increase in Excise Revenue from 8.5% to 19.1%. However, the trend analysis indicates that Excise duty revenue marginally increases by 0.6% in the FY 2014/15.

The proportion of excise taxes as a percentage of total taxes revenue has also gradually declined since 2010/2011 as reflected in (Figure 8 above). This trend begun in 2003/2004 and can largely be attributed to a shift from ad valorem to specific taxation regime particularly for beers and spirits accounting for the largest share of commodity excise tax revenue. Import Excise, being from Oil and Financial Services contribute the largest proportion to the excise portfolio, ranging from 67% to 69% between the years 2010-2015 (see Figure 10 below).

*Figure 10 : Excise Revenue Chart*
**CUSTOMS**

The statistical analysis on customs indicates that the collection of customs revenue declined in FY 2011/2012, followed by a marginal increase in the FY 2012/2013 and a 6% increase in the FY 2013/2014 and finally a 2% decline in FY 2014/2015.

The analysis above also indicates that the proportion of customs tax to total tax revenue marginally increased between the FY 2010/2011 to 2012/2013, growing at a rate of 0.1%. This was then followed by a drop in growth of 0.4% in FY 2013/2014 and a further reduction of 0.2% in 2014/2015.

The statistics indicate Kenya's consistency in policy implementation with the Common Market Protocol, which intends to reduce tariffs between the member states in order to facilitate intra-regional trade.

### 3.6.4 APPROPRIATIONS IN AID

The analysis indicates a downward trend in the proportion of revenue generated from Appropriation in Aid (AIA) as illustrated in (Figure 7). The Controller of Budget has consistently cited this as an area of concern, citing that Ministries Departments and Agencies have not included these figures in their financial reports. The office further highlighted Universities as a key institution that has inadequately reported in AIA’s.

**Figure 11: Appropriation In Aid**

![Taxes collected as AIA](image)
3.7 KENYA’S TAX EFFICIENCY

In assessing the efficiency of taxes in Kenya, the model described in the methodology yielded the following coefficients for tax buoyancy for the years 2005/2006-2014/2015;

Table 2: Tax Buoyancy Table Regression results

<table>
<thead>
<tr>
<th>Revenue Classification</th>
<th>Buoyancy Coefficient</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAYE</td>
<td>0.93</td>
<td>0.84</td>
</tr>
<tr>
<td>Other Income</td>
<td>0.85</td>
<td>0.50</td>
</tr>
<tr>
<td>VAT</td>
<td>0.66</td>
<td>0.76</td>
</tr>
<tr>
<td>Excise</td>
<td>0.35</td>
<td>0.67</td>
</tr>
<tr>
<td>Customs</td>
<td>0.66</td>
<td>0.76</td>
</tr>
<tr>
<td>Overall Tax Revenue</td>
<td>0.73</td>
<td>0.78</td>
</tr>
</tbody>
</table>

3.7.1 PAYE AND OTHER INCOME

The results above suggest that the overall tax system had a buoyancy of 0.73. This means the tax system yielded a 0.73% change in tax revenue, as a result of both automatic changes and discretionary policy for every 1% change in GDP for period FY 2005/2006 to 2014/2015. The R² statistic, being the coefficient of determination is 0.84, implying that 84% of the variation in PAYE is explained by the variation in GDP.

Other income, constituting of corporation tax, withholding tax, advance tax and individual tax, reflects a buoyancy coefficient of 0.85. Although this value is higher than the buoyancy coefficient attributed to PAYE, the R² statistic is significantly lower, at 0.5. This implies that only 50% of the variation in other income is explained by a variation in GDP. This is consistent with the literature that recommends the use of various tax bases that would reflect a strong correlation to the tax revenue, such as production.
3.7.2 IMPORT DUTY & EXCISE

The results drawn from the buoyancy model on import duty and excise duty reflect coefficients lower than 1. It is important to note that the excise coefficient, being 0.35 was the lowest coefficient in the selected taxes. This may also be due to the tax base. Although customs registered higher buoyancy that excise, both taxes do not provide an adequate yield for every 1% change in GDP.

The buoyancy of excise duty may be associated with excise duty regime applied in Kenya. Experience has shown that ad valorem taxes are more buoyant than specific taxes and would therefore lead to higher tax revenues. In addition, ad valorem rates adjust automatically to inflation, as compared to specific taxes which have to be adjusted periodically to keep up with inflation.

3.7.3 BUOYANCY OF VAT

The buoyancy analysis for VAT registered a coefficient of 0.66 with an $R^2$ value of 0.76. Although VAT is a consumption tax and utilizing consumption as a tax base would have yielding more reliable results, the use of GDP as a proxy is valuable in analysing the response of VAT to changes in overall national income. This is a helpful indicator in identifying the appropriate policy interventions to apply in order to increase the level of revenue collection in the county.
3.8 REVENUE FORECASTS

The study utilized historical time series data from 2005/2006 to evaluate the performance in revenue collection against revenue targets provided. Figure 12 displays a pictorial representation of the quarterly data. From the data, we can deduce that the revenue collections have been on an upward trend for the period above. We further deduce that the variance between the KRA collection targets and the actual exchequer revenue has been increasing from the year 2012/2013.

According to the data analysis below, the variance between targeted revenues verses the actual collections increases from FY 2012/2013. This is probably due to the increase in anticipated expenditures as a result of the implementation of the 2010 constitution following the 2013 general election. It therefore implies that the targets set for revenue collection have to be accompanied by significant tax policy measures in order to raise the required revenue.

**Figure 12**

![Revenue Collections vs Targets](image)

*Source: KRA Revenue figures*
CONCLUSION

Revenue performance denotes the relative change in the yield from tax and non-tax sources. It encompasses changes in rates, bases, and governance of revenue measures. Performance is said to be satisfactory if the given revenue sources provide increasing revenue year after year. Although the magnitude of revenue depends on the performance of each source, the structure of direct and indirect taxes also affects the overall performance. It also depends on how best the potential revenue bases have been tapped through a country’s effort to raise revenue.

This analysis has utilized three indicators to evaluate the revenue performance between the years 2010/11-2014/15. The analysis concludes that Kenya’s revenue portfolio is significantly driven by tax revenue. The analysis also concludes that the primary contributor to tax revenue is income tax. This finding is consistent with the literature on tax performance globally. It is therefore safe to conclude that direct taxes still drive the tax revenue structure of the country. The analysis of the performance of various taxes indicates that overall, there has been an increase collection of taxes in the country. The analysis also concludes that taxes from AIA have been on a downward trend. This finding is consistent with the Controller of Budget reports, which identified poor reporting of revenues generated from AIA’s by government agencies.

The analysis has provided the trends in revenue and would be valuable information to consider in the preparation of forecasts in future. The analysis has also established the buoyancy for the various taxes. It is apparent that PAYE registers the highest coefficient of buoyancy, however, still below the coefficient necessary for taxes to be considered buoyant. The performance of various taxes aligns with the findings the buoyancy and reflects the effectiveness of the tax system in responding to changes in national income.
RECOMMENDATIONS

From the study findings, the following policy considerations are recommended:

**DIRECT TAXES**

Our analysis has shown that Kenya’s revenue portfolio is heavily dependent on direct taxes, with PAYE contributing a larger proportion to overall tax revenue. It further indicates that over the 5-year period, the trend on the proportion of PAYE has increased year on year, while corporation tax has been on downward trend. This implies that the largest tax burden is applied on income, with a higher proportion applied on labour than capital.

Overall, the tax system in Kenya is designed to place a higher tax burden on high income earners and simultaneously, it gives a standard individual tax relief, thus decreasing the tax wedge on salaries in the lower income groups.

The findings indicate that PAYE is the largest contributor to Income Tax. This implies that the country needs implement policies that enhance the contribution of corporation tax to this tax head. Although the corporation tax regime has undergone numerous reforms in a bid to improve revenue mobilization and attract foreign capital, there is a high possibility that fiscal policies enforced to provide generous tax incentives to foreign corporations is decreasing the tax burden of large foreign companies rather than that of small and medium domestic enterprises.

- **Implement means tested tax incentives**

Given that tax incentives erode the tax base, we recommend that the KRA enhances its use of tax incidence analysis to establish where the highest incidence of taxation is for the Income taxes. This will allow the authority to advise the National Treasury on the appropriate means tested tax policy initiatives that utilize the ‘ability to pay principle’, foster the growth of domestic industries, cushion the vulnerable and ensure maximum revenue yield from the economy.
b. Review the income brackets

Currently, Kenya applies a progressive income tax with a top tax bracket of 30 per cent of income. We commend the National Treasury for reviewing the Income brackets through the Budget Statement FY 2015-2016 and Finance Act 2016 to reflect the economic realities of personal income in Kenya.

Figure 13 below is a pictorial representation of the trend in real wage earnings between the years 2006-2014, reflecting a downward trend in real wage earnings that could be as a result of increased inflation.

*Figure 13*

According to the 2010 KNBS consumer price index, the range of Real average wage earnings has been between 300,000 and 450,000 per annum. The change in real average wage earnings is influenced significantly by the inflationary rates. The KNBS Urban Consumer price index outlines the income groups as follows; Lower Income - KES 284,040 Per Annum (KES 23,670 per month) constituting 72% of the urban population. It defines the middle income bracket at KES 284,052 - 1,440,000 Per Annum (KES 23,671 -120,000 per month) constituting 24% of the population. It also defines the upper income bracket as being above KES 1,440,000 per annum or 120,000 per month constituting 3.76% of the population.
This analysis provides an indication that only 30% of the urban population are subjected to direct taxes.

In addition to widening the tax brackets, tax policy needs to prioritize broadening of the tax base through targeted policy measures to include the informal sector in order to prevent adverse labor incentives.

c. **Fast Track the reform of the Income Tax regime**

Our analysis has indicated the tax revenue contributes over 90% of the revenue collection in the country. It has also indicated that income tax is the largest contributor to the tax revenue basket.

The business community has consistently identified several distortions that grant some firms preferential treatment in the payment of taxes. The Cabinet Secretary in the budget statement for 2015 identified the review of the Income Tax Act as a priority reform to be completed by September 2015. Any delayed review will affect the realization of revenue targets.

d. **Shift revenue reliance away from direct taxes**

The review of the Income tax act should be coupled with efforts to implement tax policy to deliberately shift reliance from direct taxes towards indirect taxes to fund its expenditure. A shift from direct taxes to indirect taxes might exert a beneficial effect on employment levels and GDP even at unchanged overall revenue levels. This will also ensure that a larger proportion of the population is contributing to the tax net as consumption increases.

**INDIRECT TAXES**

Our analysis has shown that Kenya’s indirect taxes have the lowest buoyancy coefficient, which implies that they yield the lowest proportion of revenue to an increase in national income or GDP. Indirect taxes are also considered regressive; placing a higher tax burden on lower income groups, whose propensity to consume is higher than in the case of higher earners. Kenya’s consumption taxes are however designed to exclude the population with the lowest disposable income from the tax net.
a. **Address the progressivity of VAT**  
The progressivity of VAT has been achieved through the exclusion of basic necessities, however several proposals have been tabled to zero rate the basic consumer commodities. The government exempted these items instead of zero rating them. For the tax payer exemption is not an appropriate treatment for essential goods because when a commodity is exempt from VAT, it implies that the manufacturer incurs VAT on the raw materials however they are unable to recover this amount from VAT on the sales. The manufacturer is therefore forced to adjust prices of the commodities as a means of compensation, increasing the price of basic commodities.

b. **Apply a graduated approach to VAT**  
We recommend that a graduated VAT approach be applied to simplify its administration and enhance progressivity of the tax.

This approach is used in most of the European Union (EU) countries. The VAT directive provides that the standard rate must be between 15 and 25%. However, each member state may choose its standard rate within the parameters set out. A reduced VAT rate of at least 5% can be enacted for supplies of goods and services referred to in an exhaustive list in the VAT directive. Only Denmark applies a single standard rate of 25%.

We hereby propose that the VAT rate is split into three categories namely; firstly, a lower rate for basic consumer commodities which could be set at maybe 30% of the standard rate, secondly, a standard rate for all the other commodities and lastly a higher rate for specific commodities which are considered luxury items. This could be set at 130% of the standard rate.

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c. **Broaden the tax base**

The National Treasury has expressed intent to broaden the tax base and improve revenue administration, through policy reforms such as the revision of the excise rates for selected products through the new Excise Act 2015 anticipated to raise KES 25 Billion in revenues for the government. However, as a result of the delayed enactment of the act, the KRA forecasts revised the anticipated collection to KES 19 billion.

It may be imprudent for the government to place substantial reliance on the enactment of tax policy legislation, in forecasting for revenues necessary to fund public expenditure. This has a ripple effect on the debt obligation that government will need to engage to finance the deficit.

We therefore recommend that the Parliament prioritizes the legislation of money bills due to the potential impact on service delivery, whereas the policy makers (NT) should also be prudent when fusing forecasts premised on legislations in budget proposals especially in the base year.

**PLANNING FOR PUBLIC EXPENDITURE IN LIGHT OF REVENUE GENERATION CAPABILITIES**

Revenue generation cannot be evaluated independent of expenditure management. The FY 2014/2015 witnessed the presentation of the Kenya’s largest budget. This is projected to increase in the long run. The revenue target has as a result, substantially increased. This is telling of the ongoing economic activity. However, the expenditure reports received from the Office of the Controller of Budget and the Auditor General cast a very negative image on Kenya’s expenditure management. While revenue generation has over the years performed well, an expenditure management framework that does not reflect prudence and accountability renders the revenue generated efforts void.

It is critical for institutions mandated of provide financial oversight to ensure that wastage and poor management of public resources is met with accountability for these actions. Taxpayer compliance is strongly influenced by their perception of where their resources are being applied. The utilization of revenue generated to deliver public services will inevitably raise the tax compliance rate in the country.
REVENUE FORECASTING

Our analysis has highlighted the growing variance between revenue targets and actual exchequer collections. The utilization of the appropriate forecasting model is critical to the accuracy and sustainability of the country’s budgeting process. If revenue targets are arbitrarily set due to expenditure pressures, it will create an unhealthy appetite for expenditure that is unsustainable.

We therefore recommend that the revenue forecasts place adequate reliance on economic indicators and historical performance in order evaluate the country’s revenue potential. This also needs to be accompanied by sound tax policy that would increase the potential of collection for revenue.
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